

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO
10/660,942	09/12/2003	Stuart I. Smedley	3091.08US02	7005
24113 75	590 09/21/2006		EXAMINER	
PATTERSON, THUENTE, SKAAR & CHRISTENSEN, P.A. 4800 IDS CENTER 80 SOUTH 8TH STREET MINNEAPOLIS, MN 55402-2100			MAPLES, JOHN S	
			ART UNIT	PAPER NUMBER
			1745	
			DATE MAILED: 09/21/2000	5

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)				
	10/660,942	SMEDLEY ET AL.				
Office Action Summary	Examiner	Art Unit				
	John S. Maples	1745				
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address				
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period w - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 6(a). In no event, however, may a reply be tim fill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONEI	l. ely filed the mailing date of this communication. O (35 U.S.C. § 133).				
Status						
1) Responsive to communication(s) filed on						
3) Since this application is in condition for allowan	☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
closed in accordance with the practice under E	closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.					
Disposition of Claims						
4)⊠ Claim(s) <u>1-43</u> id/are pending in the application.						
4a) Of the above claim(s) is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.						
6) Claim(s) is/are rejected.						
7) Claim(s) is/are objected to.						
8) Claim(s) 1-43 are subject to restriction and/or e	lection requirement.					
Application Papers						
9) The specification is objected to by the Examiner						
· ·		- - - - -				
10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correcti						
11) The oath or declaration is objected to by the Ex		•				
,=	armior, recto the attached embe	7.0.1011 01 101111 1 10 102.				
Priority under 35 U.S.C. § 119						
 12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of: 1. Certified copies of the priority documents 2. Certified copies of the priority documents 3. Copies of the certified copies of the prior application from the International Bureau * See the attached detailed Office action for a list of 	have been received. have been received in Application ity documents have been received (PCT Rule 17.2(a)).	on No ed in this National Stage				
Attachment(s)	_					
1) Notice of References Cited (PTO-892)	4) Interview Summary					
Notice of Draftsperson's Patent Drawing Review (PTO-948) Information Disclosure Statement(s) (PTO/SB/08)	Paper No(s)/Mail Da 5) Notice of Informal P					
Paper No(s)/Mail Date	6) Other:					

Application/Control Number: 10/660,942 Page 2

Art Unit: 1745

121:

Election/Restrictions

1. Restriction to one of the following inventions is required under 35 U.S.C.

- Claims 1-8, drawn to a collection of particles, classified in class 420, subclass 513.
- II. Claims 9-11, drawn to a fuel cell fuel, classified in class 252, subclass512.
- III. Claims 12-13, drawn to an electrochemical cell, classified in class 429, subclass 27.
- IV. Claims 14-25, drawn to a regeneration solution, classified in class 429, subclass 206.
- V. Claims 26-28, drawn to a regeneration unit, classified in class 205, subclass 57.
- VI. Claims 29-31, drawn to a method of replenishing the fuel for a fuel cell, classified in class 429, subclass 13.
- VII. Claims 32-43, drawn to a method for electrolytically generating zinc particles, classified in class 205, subclass 64.
- 2. The inventions are distinct, each from the other because of the following reasons:

Inventions II/III and I are related as combination and subcombination. Inventions in this relationship are distinct if it can be shown that (1) the combination as claimed

does not require the particulars of the subcombination as claimed for patentability, and (2) that the subcombination has utility by itself or in other combinations (MPEP § 806.05(c)). In the instant case, the combination as claimed does not require the particulars of the subcombination as claimed because the combination does not require the size of the particles as does the subcombination. The subcombination has separate utility such as for use in chemical production of chemical compounds.

The examiner has required restriction between combination and subcombination inventions. Where applicant elects a subcombination, and claims thereto are subsequently found allowable, any claim(s) depending from or otherwise requiring all the limitations of the allowable subcombination will be examined for patentability in accordance with 37 CFR 1.104. See MPEP § 821.04(a). Applicant is advised that if any claim presented in a continuation or divisional application is anticipated by, or includes all the limitations of, a claim that is allowable in the present application, such claim may be subject to provisional statutory and/or nonstatutory double patenting rejections over the claims of the instant application.

Group V is distinct from the other product Groups I-IV since Group I includes a pump and a storage container, which elements not part of the other groups. Group IV is different than Groups I-III because Group IV comprises an alkaline aqueous electrolyte, zincate ions and at least one non-zinc metal oxide or metal hydroxide. Groups I-III do not include these three materials as does Group IV. Group III is distinct from Group II since Group III requires multiple electrodes, unlike Group II. Also, Group II sets forth an alkaline electrolyte, which feature is not part of Group III.

Application/Control Number: 10/660,942 Page 4

Art Unit: 1745

Inventions VI/VII and I-V are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make another and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case, each of the methods of Groups VI and VII could be used to produce the materially different products of those claimed in Groups I-V. In addition, Group VII is different than Group VI because Group VII requires applying a sufficient voltage to a generation solution, which limitation is not part of the Group VI method.

- 3. Because these inventions are independent or distinct for the reasons given above and there would be a serious burden on the examiner if restriction is not required because the inventions have acquired a separate status in the art due to their recognized divergent subject matter and different classification, restriction for examination purposes as indicated is proper.
- 4. Applicant is advised that the reply to this requirement to be complete must include (i) an election of a species or invention to be examined even though the requirement be traversed (37 CFR 1.143) and (ii) identification of the claims encompassing the elected invention.

The election of an invention or species may be made with or without traverse. To reserve a right to petition, the election must be made with traverse. If the reply does not distinctly and specifically point out supposed errors in the restriction requirement, the election shall be treated as an election without traverse.

Application/Control Number: 10/660,942

Art Unit: 1745

Should applicant traverse on the ground that the inventions or species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the inventions or species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C.103(a) of the other invention.

Page 5

- 5. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).
- 6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to John S. Maples whose telephone number is 571-272-1287. The examiner can normally be reached on Monday-Thursday, 6:15-3:45, and every other Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Ryan can be reached on 571-272-1292. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Application/Control Number: 10/660,942 Page 6

Art Unit: 1745

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JSM/9-7-2006